

sequence having at least about 50% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

*A1*  
*Conclude*

5. The molecule of claim 1, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

6. The molecule of claim 1, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1 or a sufficiently similar sequence thereto to exhibit the ability to regulate calcium ion entry into cells.

7. An isolated nucleic acid molecule, comprising a nucleotide sequence encoding a protein functioning in regulating calcium ion entry into cells, said nucleotide sequence having the sequence set forth in SEQ ID:1 from nucleotide 314 to nucleotide 1036.

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*A2*

11. The molecule of claim 9, wherein said protein is comprised of an amino acid sequence having at least about 30% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

12. The molecule of claim 9, wherein said protein is comprised of an amino acid sequence having at least about 50% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

13. The molecule of claim 9, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

14. The molecule of claim 9, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1 or a sufficiently similar sequence thereto to exhibit the ability to regulate calcium ion entry into cells.

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20. The host cell of claim 18, wherein said protein is comprised of an amino acid sequence having at least about 30% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

*a3*  
21. The host cell of claim 18, wherein said protein is comprised of an amino acid sequence having at least about 50% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

22. The host cell of claim 18, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

23. The host cell of claim 18, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1 or a sufficiently similar sequence thereto to exhibit the ability to regulate calcium ion entry into cells.

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*a4*  
26. A purified protein, said protein having an amino acid sequence having at least about 30% identity to the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1, said protein functioning in regulating calcium ion entry into cells.

27. The protein of claim 26, wherein said protein has an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

28. The protein of claim 26, wherein said protein has an amino acid sequence having at least about 50% identity to the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

29. The protein of claim 26, wherein said protein has an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1 or a sufficiently similar amino acid sequence

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thereto to exhibit the ability to regulate calcium ion entry into cells.

*Ay  
Dabholkar*  
30. A purified protein, said protein having an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

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*AS*  
32. A recombinant protein, comprising an amino acid sequence having at least about 30% identity to the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1, said protein functioning in regulating calcium ion entry into cells.

33. The protein of claim 32, wherein said protein has an amino acid sequence having at least about 50% identity to the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

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*Al*  
36. The method of claim 34, wherein said protein is comprised of an amino acid sequence having at least about 30% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

37. The method of claim 34, wherein said protein is comprised of an amino acid sequence having at least about 50% identity with the amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

38. The method of claim 34, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1.

39. The method of claim 34, wherein said protein is comprised of an amino acid sequence encoded by nucleotides 314-1036 of SEQ ID:1 or a sufficiently similar sequence thereto to exhibit the ability to regulate calcium entry into cells.

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